REMARKS

Claims 1-7 and 9-15 are pending in the application. Claims 1-7 and 9-15 stand rejected. Claims 1, 2, 4, 9, and 10 are amended. Claims 17-34 are added. No new subject matter is added. Claims 1-7, 9-15, and 17-34 are now pending in the application. In light of the above amendments and the following remarks, reconsideration and allowance of the pending claims is respectfully requested.

Claim Rejections – 35 U.S.C. § 102

Claims 1-7 and 9-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,285,498 (Shinsky et al.). The applicant traverses the rejections.

Regarding claim 1, the claim recites several features not taught in Shinsky. For example, the claim recites "transmitting data for each pixel of a scan line to the computer via a shift signal." The Office Action proposes that Shinsky teaches both a transfer signal and a shift signal because it teaches "CCD 12 coupled to a timing chips 14 which provides a clock signal." *See* Final Office Action page 3. However, Shinsky teaches a single clocking signal from the timing chip 14 to the CCD 12 and thus the single clocking signal of Shinsky cannot be equivalent to both the recited transfer signal and shift signal. *See* Shinsky col. 1, lines 33-39. Further, Shinsky does not teach that its clocking signal (or any other signals) includes data for each pixel of a scan line. Therefore, Shinsky does not teach transmitting data via a shift signal as recited in claim 1.

Claim 1 also recites "adjusting a period of the shift signal based at least in part on a speed of reading the data by the computer." As discussed above, Shinsky does not teach a shift signal at all, so it could not teach adjusting a period of a shift signal. However, even if some signal in Shinsky was considered to be equivalent to the recited shift signal, Shinsky does not teach that the period of any of its signals is adjusted based on the reading speed of the computer. Shinsky does not even mention the reading speed of its host computer 20. Further, there would be no reason for adjusting the period of a signal out of CCD 12 responsive to a read speed of host computer 20 in Shinsky because the system of Shinsky includes both a sample and hold circuit 16 and a DSP 18 between the CCD 12 and the host computer 20. *See* Shinsky FIG. 1. Therefore, Shinsky does not teach adjusting a period of a shift signal as recited in the claim.

Claim 1 further recites "data for all of the pixels of the scan line is transmitted during a period of the transfer signal." As discussed previously, Shinsky does not teach a transfer signal. The only signal taught going to CCD 12 in Shinsky is from timing chip 14. *See* Shinsky FIG. 1. Shinsky does not specifically teach that all of the data from a scan line is transmitted from CCD 12 to host computer 20 during a period of its clocking signal. Further, since sample and hold circuit 16 and DSP 18 are between the CCD 12 and the DSP 18, it would not be possible in Shinsky to transmit all of the data of a scan line from CCD 12 to host computer 20 during a period of the clocking signal. Therefore, Shinsky does not teach transmitting data for all of the pixels in a scan line during a period of a transfer signal as recited in claim 1.

For at least the reasons identified above, Shinsky fails to anticipate claim 1 as it does not teach all of the features recited in the claim. Consequently, claim 1 is allowable over Shinsky, as are dependent claims 2-7.

Further regarding claim 2, the claim recites "adding a waiting time to the shift signal based at least in part on a period of the transfer signal." As discussed above, Shinsky does not teach a shift signal, so it could not teach adding a waiting time to the shift signal. Further, Shinsky does not teach adding a waiting time to any of the signals in its system. Finally, there would be no reason to add a waiting time to a signal coming out of CCD 12 in Shinsky because the system of Shinsky includes sample and hold circuit 16 between the CCD 12 and the host computer 20. Therefore, Shinsky does not teach adding a waiting time to a shift signal as recited in the claim. For at least this additional reason, claim 2 is allowable over Shinsky.

Further regarding claim 4, the claim recites "the period of the transfer signal comprises a variable period of time." Shinsky does not teach that any of its signals comprise a variable period. Specifically, Shinsky does not teach that its clocking signal provided by the timing circuit 14 to the CCD 12 includes a variable period. Shinsky does not address the period of its clocking signal at all. *See* Shinsky col. 1, lines 33-39. Therefore, Shinsky does not teach a transfer signal with a variable period as recited in the claim. For at least this additional reason, claim 4 is allowable over Shinsky.

Further regarding claims 5 and 6, the claims refer to the transfer signal and the shift signal being enabled at a high level, respectively. Shinsky does not teach anything about its clocking signal, or any other signals, being enabled at a high level. Shinsky does not address the

enable states of any signals in its disclosure. Therefore, Shinsky does not teach transfer and shift signals enabled at a high level as recited in the claims. For at least this additional reason, claims 5 and 6 are allowable over Shinsky.

Regarding claim 9, the claim recites several features not taught in Shinsky, as discussed above with respect to claim 1. In addition to these features, claim 9 recites "performing at least one of: (a) decreasing a period of the shift signal if the computer uses a first processing speed to process the pixel data or (b) increasing the period of the shift signal if the computer uses a second processing speed to process the pixel data." As discussed above, Shinsky does not teach a shift signal and so it could not teach adjusting a shift signal. Further, if some signal in Shinsky were to be considered equivalent to the recited shift signal, Shinsky does not teach that the period of any of its signals is decreased or increased responsive to the processing speed of its host computer 20. Shinsky does not address the processing speed of its host computer 20 anywhere in its disclosure, so it could not teach adjusting signal periods in response to the processing speed. For at least these reasons, Shinsky fails to anticipate claim 9 as it does not teach all of the features of the claim. Therefore, claim 9 is allowable over Shinsky, as are dependent claims 10-16.

Further regarding claims 10-15, the claims recite features similar to those discussed above with respect to claims 2-7. Therefore, claims 10-15 are allowable over Shinsky for at least the same reasons identified above with respect to claims 2-7.

New Claims

New claims 17-22 are fully supported by the application as filed at, e.g., paragraph [0023] and FIGS. 3 and 4. The new claims recite several features that are not taught in Shinsky, similar to those discussed above with respect to claims 1-7. The new claims also recite features that are not addressed above, but are likewise not taught in Shinsky including: an exposure time; one or more reading times and one or more waiting times; a duration of the waiting times determined by a reading speed of the computer; each period of the shift signal comprises data for a single pixel of the scan line; and the exposure time begins when the transfer signal goes high. Since Shinsky does not address the specifics or content of any of its signals, it could not teach

the recited claim features. Therefore, the applicant submits that new claims 17-22 are allowable over Shinsky.

New claims 23-34 are fully supported by the application as filed at, e.g., paragraphs [0023]-[0024] and FIG. 3. The new claims recite several features that are not taught in Shinsky, similar to those discussed above with respect to claims 1-7. Therefore, the applicant submits that new claims 17-22 are allowable over Shinsky.

CONCLUSION

For the foregoing reasons, reconsideration and allowance of all pending claims is requested. The Examiner is encouraged to telephone the undersigned at 503-222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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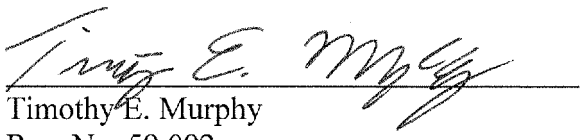

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